

PATENT CLAIMS:

1. A hearing aid or a hearing aid component for placement in the auditory canal and/or in or behind the auricle of a wearer, with a biofilm-inhibiting coating of an inorganic condensate modified with organic groups on the basis of a coating composition, which includes a hydrolysate or pre-condensate of one or more hydrolysable compounds with at least one non-hydrolysable substituent, whereby at least one part of the organic groups of the condensate exhibits fluorine atoms and/or copper or silver colloids are contained in the coating.

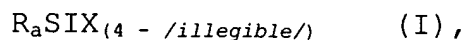
2. A hearing aid or a hearing aid component as set forth in claim 1, characterized in that the hearing aid or a hearing aid component exhibits a synthetic surface or is made of synthetics at least at the coated parts.

3. A hearing aid or a hearing aid component as set forth in claim 1 or 2, characterized in that the synthetic is a polymethylmethacrylate.

4. A hearing aid or a hearing aid component as set forth in at least one of the claims 1 to 3, characterized in that the otoplastics exhibits a base coating under the biofilm-inhibiting coating.

5. A hearing aid or a hearing aid component as set forth in at least one of the claims 1 to 4, characterized in that the hydrolysable compounds comprise at least one or more hydrolysable silanes with at least one non-hydrolysable substituent.

6. A hearing aid or a hearing aid component as set forth in at least one of the claims 1 to 5, characterized in that the hydrolysable compounds comprise one or more silanes according to the general formula (I)

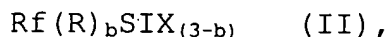


wherein the residues R are analogous or different and represent non-hydrolysable groups, the residues X are analogous or different and represent hydrolysable groups or hydroxyl groups and a has a value of 1, 2 or 3.

7. A hearing aid or a hearing aid component as set forth in at least one of the claims 1 to 6, characterized in that the hydrolysable compounds comprise

one or more silanes that exhibit at least one non-hydrolysable residue, which comprises a functional group, in particular a carbon-carbon double bond that allows cross-linking.

8. A hearing aid or a hearing aid component as set forth in at least one of the claims 1 to 7, characterized in that the hydrolysable compounds comprise one or more silanes of the general formula (II)



wherein X and R are defined as in formula (I), Rf is a non-hydrolysable group that exhibits 1 to 30 fluorine atoms bound to carbon atoms, and b is 0, 1 or 2.

9. A hearing aid or a hearing aid component as set forth in at least one of the claims 1 to 8, characterized in that the coating composition contains copper or silver compounds, preferably copper or silver complex compounds.

10. A hearing aid or a hearing aid component as set forth in at least one of the claims 1 to 9, characterized in that the coating composition contains nanoscale inorganic particles.

11. A hearing aid or a hearing aid component as set forth in at least one of the claims 1 to 10, characterized in that the biofilm-inhibiting coating can be obtained by applying the coating composition to at least a portion of the surface of the hearing aid or component of the hearing aid and by heat and/or radiation treatment, preferably radiation.

12. A hearing aid or a hearing aid component as set forth in at least one of the claims 1 to 11, characterized in that the copper or silver compounds contained in the coating composition are converted to copper or silver colloids through heat and/or radiation treatment.

13. A hearing aid or a hearing aid component as set forth in at least one of the claims 1 to 12, characterized in that the biofilm-inhibiting coating can be obtained by applying the coating composition that comprises a copper or silver compound, and by heat and/or radiation treatment under formation of the copper or silver colloid-containing coating.

14. A hearing aid or a hearing aid component as set forth in at least one of the claims 1 to 13, characterized in that a portion of the organic groups of the condensate exhibits

fluorine atoms and in that in addition copper or silver colloids are contained in the coating.